

ABSTRACT

A data sonde for use in horizontal directional drilling comprising a battery housing to receive a power supply from an internal battery, a connector to receive a power supply from an external power supply cable, and an antenna to emit radiation, is provided, wherein the antenna is arranged to receive operative power from an external power supply when one is connected to the connector, and from a battery housed in the battery housing if no external power supply is connected to the connector. A method of operation of the same is also provided. Additionally, a system for communicating between a data sonde and a remote apparatus connected by cable power supply is provided, the system comprising circuitry to control the energisation of an antenna in the data sonde with a modulation representing data to be transmitted to the remote receiving apparatus, and a detector at the remote apparatus to detect the data for output at the remote apparatus from the DC modulation in base band power consumption of the data sonde corresponding to the DC modulated energising of the data sonde antenna.